[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 49899 8/16/2000]

[Docket No. 99-NM-233-AD; Amendment 39-11863; AD 2000-16-08]

RIN 2120-AA64

Airworthiness Directives; Lockheed Model L-1011-385 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Lockheed Model L-1011-385 series airplanes, that currently requires repetitive inspections to detect cracking of the canted pressure bulkhead at fuselage station (FS) 1212, and repetitive inspections to detect cracking of the web at the fastener rows of the vertical stiffener-to-web; and repair or replacement of the web with a new web, if necessary. This amendment requires that the initial inspections be accomplished at a reduced threshold. This amendment is prompted by a report of fatigue cracking of the canted pressure bulkhead at FS 1212. The actions specified by this AD are intended to detect and correct fatigue cracking of the canted pressure bulkhead at FS 1212, which could result in blowout of a panel between adjacent stiffeners and consequent cabin depressurization.

DATES: Effective September 20, 2000.

The incorporation by reference of Lockheed Service Bulletin 093-53-277, Revision 1, dated November 19, 1998, as listed in the regulations, is approved by the Director of the Federal Register as of September 20, 2000.

The incorporation by reference of Lockheed Service Bulletin 093-53-277, dated July 2, 1996, as listed in the regulations, was approved previously by the Director of the Federal Register as of October 25, 1996 (61 FR 53044, October 10, 1996).

ADDRESSES: The service information referenced in this AD may be obtained from Lockheed Martin Aircraft & Logistics Center, 120 Orion Street, Greenville, South Carolina 29605. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Thomas Peters, Program Manager, Program Management and Services Branch, ACE-118A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6063; fax (770) 703-6097.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 96-20-10, amendment 39-9776 (61 FR 53044, October 10, 1996), which is applicable to certain Lockheed Model L-1011-385 series airplanes, was published in the **Federal Register** on October 6, 1999 (64 FR 54230). The action proposed to supersede AD 96-20-10 to continue to require repetitive inspections to detect cracking of the canted pressure bulkhead at FS 1212, and repetitive inspections to detect cracking of the web at the fastener rows of the vertical stiffener-to-web; and repair or replacement of the web with a new web, if necessary. The action also proposed to require that the initial inspections be accomplished at a reduced threshold.

Comment Received

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

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The commenter requests that the FAA revise paragraphs (b)(1)(i) and (b)(1)(ii) of the proposal to reference Section 53-11-00, Figure 854, of the L1011 Structural Repair Manual (SRM), dated March 15, 1999. Lockheed Repair Drawing LCC-7622-385 is referenced in the proposal as the appropriate source of service information for identifying areas in which cracking may be found. The commenter indicates that the drawing has been revised and incorporated into the SRM since the release of Lockheed Service Bulletin 093-53-277, Revision 1, dated November 19, 1998. The commenter states that confusion could arise due to the nature of certain LCC drawings that are not formally controlled or released; operators could have the outdated version of the drawing on file. The revised LCC drawing and new SRM figure provide more detail of the inspection area and more detail of the repair instructions on the bulkhead than those specified in the original version of the drawing.

The FAA concurs with the commenter's request to reference the revised service information, and has revised the final rule accordingly. However, the FAA finds that both repair drawings adequately identify the areas in which cracking may be found. Therefore, the FAA has added a note to the final rule to give operators credit for using the version of the repair drawing cited in the proposal.

Conclusion

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change previously described. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 235 airplanes of the affected design in the worldwide fleet. The FAA estimates that 116 airplanes of U.S. registry will be affected by this AD. The requirements of this AD will not add any new additional economic burden on affected operators other than the costs that are associated with beginning the inspection at an earlier time than would have been required by AD 96-20-10 (initial inspection is now required within 18,000 flight cycles, rather than 20,000 flight cycles).

The actions that are currently required by AD 96-20-10, and are retained in this AD, take approximately 5 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$34,800, or \$300 per airplane, per inspection cycle.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-9776 (61 FR 53044, October 10, 1996), and by adding a new airworthiness directive (AD), amendment 39-11863, to read as follows:

AIRWORTHINESS DIRECTIVE



REGULATORY SUPPORT DIVISION P.O. BOX 26460 OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department of Transportation Federal Aviation Administration

AD's are posted on the internet at http://av-info.faa.gov

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2000-16-08 LOCKHEED: Amendment 39-11863. Docket 99-NM-233-AD. Supersedes AD 96-20-10, Amendment 39-9776.

Applicability: Model L-1011-385 series airplanes; serial numbers 1013 through 1250 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the canted pressure bulkhead at fuselage station (FS) 1212, which could result in blowout of a panel between adjacent stiffeners and consequent cabin depressurization, accomplish the following:

Repetitive Inspections

- (a) Perform a detailed visual inspection to detect cracking of the entire aft surface of the canted pressure bulkhead at FS 1212 between left buttock line (LBL) 103 and right buttock line (RBL) 103; and perform an optical inspection using a borescope or other optical device to detect cracking of the web at the fastener rows of the vertical stiffener-to-web; in accordance with Lockheed Service Bulletin 093-53-277, dated July 2, 1996, or Revision 1, dated November 19, 1998; at the earlier of the times specified in paragraphs (a)(1) and (a)(2) of this AD. Thereafter, repeat these inspections at intervals not to exceed 1,000 flight cycles.
- (1) Prior to the accumulation of 20,000 total flight cycles, or within 60 days after October 25, 1996 (the effective date of AD 96-20-10), whichever occurs later; or
- (2) Prior to the accumulation of 18,000 total flight cycles, or within 60 days after the effective date of this AD, whichever occurs later.
- NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Repair

- (b) If any cracking is found during any inspection required by paragraph (a) of this AD, prior to further flight, accomplish either paragraph (b)(1) or (b)(2) of this AD.
 - (1) Accomplish either paragraph (b)(1)(i) or (b)(1)(ii) of this AD, as applicable.
- (i) If the cracking is found in an area that is specified Lockheed Service Bulletin 093-53-277, dated July 2, 1996, or Revision 1, dated November 19, 1998, repair in accordance with Section 53-11-00, Figure 854, of the L-1011 Structural Repair Manual (SRM), dated March 15, 1999. Accomplishment of a repair in accordance with this paragraph constitutes terminating action for the repetitive inspections required by paragraph (a) of this AD at the repaired location only. Or
- (ii) If the cracking is found in an area that is not specified in Lockheed Service Bulletin 093-53-277, dated July 2, 1996, or Revision 1, dated November 19, 1998, repair in accordance with a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate.

- NOTE 3: Lockheed Repair Drawing LCC-7622-385 also is considered an acceptable source of service information for the accomplishment of the requirements of paragraph (b)(1)(i) of this AD.
- (2) Replace the entire web with a new web in accordance with Lockheed Service Bulletin 093-53-277, dated July 2, 1996, or Revision 1, dated November 19, 1998. Such replacement constitutes terminating action for the repetitive inspections required by paragraph (a) of this AD.

Alternative Methods of Compliance

- (c) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.
- (2) Alternative methods of compliance, approved previously in accordance with AD 96-20-10, amendment 39-9776, are approved as alternative methods of compliance with paragraph (b) of this AD.
- NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) Except as provided by paragraph (b)(1)(ii) of this AD, the actions shall be done in accordance with Lockheed Service Bulletin 093-53-277, dated July 2, 1996; or Lockheed Service Bulletin 093-53-277, Revision 1, dated November 19, 1998. Revision 1 of Lockheed Service Bulletin 093-53-277 contains the following list of effective pages:

Page Number	Revision Level	Date
	Shown on Page	Shown on Page
1-3, 5	1	November 19, 1998
4, 6-9	Original	July 2, 1996

- (1) The incorporation by reference of Lockheed L-1011 Service Bulletin 093-53-277, Revision 1, dated November 19, 1998, is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) The incorporation by reference of Lockheed Service Bulletin 093-53-277, dated July 2, 1996, was approved previously by the Director of the Federal Register as of October 25, 1996 (61 FR 53044, October 10, 1996).
- (3) Copies may be obtained from Lockheed Martin Aircraft & Logistics Center, 120 Orion Street, Greenville, South Carolina 29605. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.
 - (f) This amendment becomes effective on September 20, 2000.

FOR FURTHER INFORMATION CONTACT: Thomas Peters, Program Manager, Program Management and Services Branch, ACE-118A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6063; fax (770) 703-6097.

Issued in Renton, Washington, on August 8, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.